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THE

PLOTTER

CLACKAMAS COUNTY AREA T/S
USERS GROUP
NEWS LETTER
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VOLUME 8 ** NUMBER 11
******
NOVEMBER 1990

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MEETING

The NOVEMBER meeting will be:

on: FRI., NOV 14, 1990

meeting room open at: 7:00 P.M.
in: COMMUNITY ROOM
FAR WEST FEDERAL S & L
OREGON CITY SHOPPING CENTER

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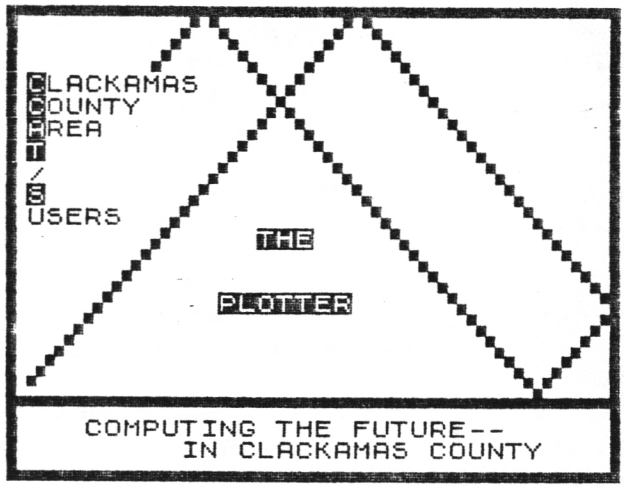
WHAT YOU WILL FIND IN THIS ISSUE



EDITORIAL

Computers are many things to many people, from livelyhood, to a fun machine, to a pain in the neck or more for some.

Recently I was exasperated by a second error in billing from the credit card company. The first was irritating with an erroneous trasposed item of numbers on one charge, all of 99 cents. This was an input error, plain and simple. But what a hassel to get it corrected.

This last error was adding in the interest that would be charged if the account was not paid on time, another posting error.

An 800 call to the credit card company finally was answered after a prolonged music session. A very nice voice answered. As I explained the problem after giving rank and serial number, I could hear the computer keys clicking as she brought up my account record. Yes, there was an interest statement, but no, it did not belong in the charge column. That was put in to inform me what the interest would be.

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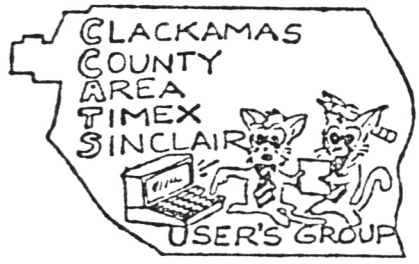


Continued from Page 1
So what should I do, I asked her. The simplest was to pay the additional amount and then get credit for it later. I explained, no way as this was the second error in two months. The alternative was to write a letter explaining the amount I was paying. However, she suggested mailing it to the service department from which point corrections in various records would be initiated.

After hanging up the phone I remarked to my wife about what a difficult job that girl had, fielding all kinds of complaints all day long, punch, punch, punch on the terminal keyboard, looking for records of all kinds, and trying to explain other people's errors. Not even a chance to go and pull out a file drawer, as in the "good old days". How she was able to maintain a friendly cheery voice at 2 PM on Friday, I do not know. I am sure she exemplifies the desireable traits for the job, far different from the file drawer period. I didn't inquire if she suffered from computeritus, the debilitating effects of sore back, neck pains, eye strain, stiff fingers, headackes, etc. I am sure she does not play computer games at home.

OCTOBER MINUTES

The October 12, 1990 meeting was called to order at 7:45 PM by Treasurer Rod Gowan, he being the only officer present.

Terry Graham reported that he had a substantial amount of material for the TS 1000 he was donating to the CCAT/S library. He also offered some print-outs of local BBS for interested members.

There was an offer for next meeting demonstration using the XMODEM system.

As has reported in the past, BBs carrying Timex/Sinclair material were taking steps to discontinue this service for lack of use. Rod reports that this is now a fact and the service is no longer available.

D.S. Lewis reminded members that Saturday, 13th, was the day for the CP/M sponsored swap meet at Tigard. This is a twice annual affair with many bargains.

Guest Dutch Lewis (now a member) is using a TS 1000 system with a color TV. He has been experiencing the usual poor display and asked for help. The solution is to operate in the B/W mode.

Guest John Meissen was introduced by Donald Malm. This was followed by members giving their names for benefit of the guests.

Rod reported that the Shopper magazine put out by the Vulcan Press now carries a TS column written mainly by Stan Williamson. It was also reported that Bill Jones of UP DATE magazine fame has been busy on a new data base program, besides improving Daisy B6.

Members were reminded that elections for 1991 officers would be in December so nominations will be accepted at the November 9th meeting.

Guest John Meissen presnted his experiences in developing the SuperBasic compiler used in the first QLs. He was the main programmer on theis project in 1984 when he was working for Lattice. This was a 6 month project. He also described other systems he has worked on since the QL project. Some never reached production mainly due to lack of financing.

Rod reported that books and magazines have been put in storage provided by Galen Bench. Inquires for specific material should go to Rod so arrangements can be made to take it out of storage.

Meeting was adjourned at 8:30 so the SEG group could continue with MS-DOS instruction.

Dick F. Wagner
Acting Secretary

MIKE'S NOTEBOOK

By: Michael J. Di Rienzo

One of the fundamental concepts of computer graphics programming is that of viewport clipping, or eliminating all lines of a display outside the screen. Type in PROGRAM #1 and run it to see what happens. Notice that when any line attempts to go beyond the screen bounds you get a "B Integer out of range" error. But using a clipping algorithm, every line segment is checked to see if all or part of it will go off the screen. If so, the program will recalculate the line segment and only DRAW the part lying within the screen. Now, erase lines 100 and 230 of PROGRAM #1 and add PROGRAM #2. The second program is the clipping algorithm and line 220 does the plotting. Note that the algorithm considers one line segment at a time using xs and ys as the starting coordinates for the X and Y points, and xe,ye as the line end point coordinates. Once these are set, the algorithm goes to work to clip any part of the line which goes off the screen. Since the first part of this program is only a demo, you can adapt any of your graphics programs to work with this algorithm. You'll need to study it though, to make it work for you. The screen viewport is 256 X 176 pixels. Note that the midpoint of the screen bounds are set at line 100. The start and end coordinates must be absolute values, eg. 128,88 or 44,105, and not relative values, eg. -10,25 or -50,-100. Using "-PEEK 23677" and "-PEEK 23678" in line 220 converts the absolute values to relative values because thats what the DRAW keyword requires. But thats another story. This program is compilable using NovelSofts "TIMACHINE". Play with the value in line 10 for other shapes. Have fun!

Happy TIMEXing...

"CLIP"

By Michael J. Di Rienzo

PROGRAM #1

```
 10 LET n=6
 20 FOR b=100 TO 590 STEP 70
 30 FOR c=0 TO 810 STEP 19
 40 LET r=b*ABS (SIN (n*c)-(COS
(n*c)))
 50 LET xe=128+r/6*COS c
 60 LET ye=88+r/6*SIN c
 70 IF c=0 THEN GO SUB 230
 80 GO SUB 100: NEXT c: NEXT b
 90 PLOT 0,0: DRAW 255,0: DRAW
0,175: DRAW -255,0: DRAW 0,-175:
 STOP
 100 PLOT xs,ys: DRAW xe-PEEK 23
677,ye-PEEK 23678
 230 LET xs=xe: LET ys=ye: RETUR
N
```

PROGRAM #2

```
 100 LET mx=127.5: LET my=87.5
 110 LET x1=xs-mx: LET y1=ys-my
 120 LET x2=xe-mx: LET y2=ye-my
 130 GO SUB 300: GO SUB 330
 140 IF NOT (s1 OR s2 OR t1 OR t
2) THEN GO TO 220
 150 IF NOT (s1*s2-1)*(t1*t2-1)
THEN GO TO 230
 160 IF s1 THEN LET y1=FN y(s1):
 LET x1=mx*s1: GO SUB 300
 170 IF t1 THEN LET x1=FN x(t1):
 LET y1=my*t1
 180 IF s2 THEN LET y2=FN y(s2):
 LET x2=mx*s2: GO SUB 330
 190 IF t2 THEN LET x2=FN x(t2):
 LET y2=my*t2
 200 GO SUB 300: GO SUB 330
 210 IF (s1 OR t1 OR s2 OR t2) T
HEN GO TO 230
 220 PLOT x1+mx,y1+my: DRAW x2+m
x-PEEK 23677,y2+my-PEEK 23678
 230 LET xs=xe: LET ys=ye
 240 RETURN
 300 LET s1=FN z(x1,mx)
 310 LET t1=FN z(y1,my)
 320 RETURN
 330 LET s2=FN z(x2,mx)
 340 LET t2=FN z(y2,my)
 350 RETURN
 500 DEF FN x(s)=x1+(my*s-y1)*(x
2-x1)/(y2-y1)
 510 DEF FN y(s)=y1+(mx*s-x1)*(y
2-y1)/(x2-x1)
 520 DEF FN z(a,m)=SGN a*(ABS a>
m)
```

3-D TIC TAC TOE

Dick F. Wagner

This game was reserected from the Timex Sinclair User magazine, Vol 1, #7. Originally written for the TS 1000, it was easily adapted to the 2068. The only difference was the use of the command INVERSE 1 or 0 to obtain the "X" or "O" in inverse video for the player's positions. My revised ROM IC does not support INVERSE VIDEO, for some reason. This is a 2-person game so you do not play against the computer.

There are 3 planes of 9 positions each, "A", "B", and "C". The game requires all 27 positions be filled to reach a conclusion. If an incorrect plane is chosed the game will halt, so be sure of the correct input. The input is a letter and a number, as "A7". The players are identified as "X" and "O". A running score shows, as well as the turn. Use "R" to restart a game. The easiest way to terminate a game seems to be to input an illegal letter.

The most difficult part of entering the program is getting the correct numbers in lines 30, 35, 60, and 65. Have someone read the numbers as you input them. Next, are the correct positions for the graphics in lines 1004-1036. The keys used are G3, GS3, GS5, G5, and GS8. Sketch each block that corresponds to these keys for reference. The numbers on each face will be overwritten by the player's "X" or "O", so they must be in the exact location.

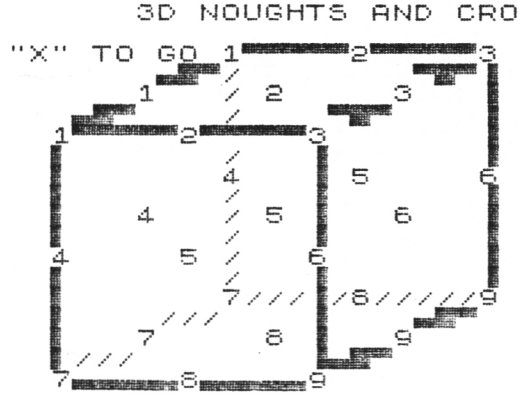
An improvement would be to change the face letters A, B, and C inputs so any other letters except R would be "ILLEGAL, TRY AGAIN". Also, add an INPUT that would stop the game.

The following diagram shows what the image should be before playing. As the game plays without the diagram, you can input part of the playing board and then run the game to see that things are right.

```
  5 DIM A(27)
 10 DIM C(18)
 15 DIM R(18)
 20 DIM X(27)
 25 DIM Y(27)
 30 LET X$="020814020814020814061218061218061218101622101622101622"
 35 LET Y$="060606121212181818040404101010161616020202080808141414"
 40 FOR Z=1 TO 27
 45 LET X(Z)=VAL X$(2*Z-1 TO 2*Z)
 50 LET Y(Z)=VAL Y$(2*Z-1 TO 2*Z)
 55 NEXT Z
 60 LET C$="020405050505060810111111112131313"
 65 LET R$="010301020304030109010809100903060912"
 70 FOR Z=1 TO 18
 75 LET C(Z)=VAL C$(2*Z-1 TO 2*Z)
 80 LET R(Z)=VAL R$(2*Z-1 TO 2*Z)
 90 NEXT Z
100 FOR Z=1 TO 27
105 LET A(Z)=0
110 NEXT Z
115 LET S=1
120 LET N=1
170 CLS
175 GO SUB 1000
180 IF S=1 THEN PRINT AT 2,0;""X"" TO GO"
185 IF S=-1 THEN PRINT AT 2,0;""O"" TO GO"
190 PRINT AT 20,14;"
"
200 INPUT Z$
205 IF N=28 THEN GO TO 100
210 IF Z$(1)="R" THEN GO TO 100
215 IF Z$(1)="A" THEN LET Z=0
220 IF Z$(1)="B" THEN LET Z=9
225 IF Z$(1)="C" THEN LET Z=18
235 LET Z=Z+VAL Z$(2)
240 IF A(Z)<>0 THEN GO TO 390
245 IF N=1 AND Z=14 THEN GO TO 390
250 LET A(Z)=S
255 LET N=N+1
260 IF S=1 THEN PRINT AT Y(Z),X(Z); INVERSE 1;"X"; INVERSE 0
265 IF S=-1 THEN PRINT AT Y(Z),X(Z); INVERSE 1;"O"; INVERSE 0
270 GO SUB 500
275 LET S=-S
280 GO TO 180
390 PRINT AT 20,14;"ILLEGAL, TRY AGAIN"
395 GO TO 200
505 LET SX=0
510 LET SO=0
515 FOR Z=1 TO 13
520 LET W=A(14-Z)+A(14)+A(14+Z)
525 IF ABS W=3 THEN GO SUB 800
530 NEXT Z
535 FOR Z=1 TO 18
540 LET W=A(C(Z)-R(Z))+A(C(Z))+A(C(Z)+R(Z))
545 IF ABS W=3 THEN GO SUB 800
550 LET V=28-C(Z)
555 LET W=A(V-R(Z))+A(V)+A(V+R(Z))
560 IF ABS W=3 THEN GO SUB 800
565 NEXT Z
570 PRINT AT 20,0; INVERSE 1;" "; INVERSE 0;"=";SX;","; INVERSE 1;"O"; INVERSE 0;"=";SO
580 RETURN
800 IF W=3 THEN LET SX=SX+1
803 IF W=-3 THEN LET SO=SO+1
810 RETURN
```

Continued from page 4

```
1000 PRINT AT 0,6;"3D NOUGHTS AN
D CROSSES"
1004 PRINT AT 2,10;"1      2
3"
1006 PRINT AT 3,7;"    /
  "
1008 PRINT AT 4,6;"1   / 2     3
  "
1010 PRINT AT 5,3;"    /
  "
1012 PRINT AT 6,2;"1      2      3
  "
1014 PRINT AT 7,2;"       /
  "
1016 PRINT AT 8,2;"       4
 5    6"
1018 PRINT AT 9,2;"       /
  "
1020 PRINT AT 10,2;"   4   / 5
   6  "
1022 PRINT AT 11,2;"       /
  "
1024 PRINT AT 12,2;"4      5 /
6 "
1026 PRINT AT 13,2;"       /
  "
1028 PRINT AT 14,2;"       7///
/8/////9"
1030 PRINT AT 15,2;"    ///
  "
1032 PRINT AT 16,2;"   7     8
   9"
1034 PRINT AT 17,2;"///
  "
1036 PRINT AT 18,2;"7      8
9"
1090 RETURN
```



BITS & BYTES

by: ROD GOWEN

Heard any TS related news lately? Did you get any information in the mail from other users, user groups, or vendors that may be of interest to our readers? If so, why not share it with us? We need all of the help that we can get. Please send any info that you might have to: Rod Gowen, C/O CCAT/S, 1419 1/2 7th Street, Oregon City, OR 97045, or, phone in at: 503/655-7484, NOON - 10 PM weekdays. I know that the entire user group will appreciate it!

PC SEG MEETING-

Our regular meeting of the new PC-SEG went well. We had a couple of folks there who were not at previous meetings. We hope that, as time goes by, we will pick up more interest in the SEG. If you have to use MS-DOS, why not get more out of it? Learn to make the most of it! It is to help you that the SEG was formed.

UPDATES MAGAZINE-

Has still not appeared in my mailbox, have you seen one? We were told that the new publisher would have the issue out about 10/1 and here we are at the end of 10/90 and still no sign of it. I hope that we see it soon. Cross your fingers!

A NEW MEMBER-

to welcome to the fold! DUTCH LEONARD is his name. Let's make him feel at home here. He is a 1000 user and wants to learn all that he can. Welcome aboard Dutch!

ZEBRA GRAPHICS-

are now available from RMG. If you were waiting for the icons that Zebra announced a couple of years ago and never saw them, now you can get them from RMG. Give them a call or write to them at the address on the back of this newsletter for info.

NOMINATIONS ARE OPEN-

at the November meeting. Be sure to attend and put in your two cents worth. If you do not, then you have no right to say anything when you do not like what the group is about. As usual, the ballots will be mailed with the December newsletter and will be due back in by 12/15/90 in order to be counted and the new officers will be installed at the January meeting. See you there in November!

ZXAPPEAL FOLDS-

after nearly 8 years of publication, the newsletter of the Vancouver, BC user group is being laid to rest unless a new volunteer editor. ROD HUMPHREYS, the outgoing editor is retiring due to "lack of reader interest and spirit of contribution" to the newsletter. We are always sorry to see a GOOD newsletter go down, but when it is one as good as this one it is even sadder. R.I.P. ZXAPPEAL!

A UNIVERSAL DATA BASE MANAGER

Bill Jones, past editor of UP DATE magazine, fluent programmer and writer, and just a good guy who knows the INs and OUTs of his TS-2068 system, has sent our Club (the term used to be User Group) a complimentary copy of his latest creation, "Udbm.B6". This is a full fledged Universal Data Base Manager.

As this just came to me at the newsletter assembly time, there has been no time to even read the manual, except the historical background. I found this so interesting that it is being printed in full. This will lay the ground work for future references to Udbm.B. Sequential files and LKDOS seem to be the foundation for this cluster of programs. The program is supplied on 80 track LKDOS, which will be trasferred to 40 track LKDOS disks for member use.

THE EDITOR

DATA BASES And Their Management

The original TS-2068 has the capability of managing only two types of Data Bases, "Code Data" and "Character Strings" Data. The latter has two branches "Single String Data" (as in A$"), and "Dimensioned Array Data" (as in "A$(10,600").

Traditionally, TS-2068 programmers have concentrated on using the CODE FILE as the means for processing DATA. Almost ALL of the software for the TS-2068 use CODE files for Data Processing. The Character String and Character Array modes of Data Management have been used mostly for minor data bases involving "Columns of figures", and "Columns of numbers", with little use for Text Data Processing. This trend evolved for several reasons. 1. Code Programs could conserve "PROGRAM MEMORY" and provide large data bases to be constructed "In Memory". 2. Code Programs could be constructed that would TRAP ALL ERRORS and prevent Program Stoppage (The Basic Report Codes). 3. Code Programs work Faster than Basic.

There is a fourth underlying reason for avoiding Basic as the programming language for Data Base Management. That is the fact that the "Programmers learn programming in schools", and schools throughout North America used the 6502 CPU primarily as the basis for their instruction. The 6502 CPU lacked the abilities or our Z-80 CPU for processing String Data. Historically, the Z-80 CPU was not taught in schools. The possible reasons were that TANDY Computers were cheaper to equip classrooms than the existing Zerox Computer systems. Then IBM Computer systems began using the 6502 CPU.

So, looking back, the Z-80 CPU, a very advanced 8 bit CPU, was never "the CPU for Colleges to Teach". I suppose that it would have been, but along came the 16 and 32 bit CPUs that made 8 bit CPUs "not in vogue". The result of all of this has been the "more capable" Z-80 CPU was relegated to the status of the Zeppelin, a faster and more efficient Flying machine that was quickly superceded by the Air-line Airplanes.

There is more than nostalgia in the above. Clive Sinclair

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realized the greater potential that the Z-80 offered. He even used the Z-80 CPU in a 1988 computer, the Z88 Laptop, and he more or less apologized for his lapse while producing the Sinclair QL. I wouldn't be at all surprised if Sir Clive produced another Z-80 based computer during the 1990s. Only Sir Clive and a very few others seem to realize the Z-80 CPU Potential. All that the Z-80 needs is "Higher Clock Speed" which is now a possibility. How about a "Z-80" CPU Up-grade?

This look-back brings us up to around the year 1987 when the TS-2068 DISK DRIVES were introduces. DISK SYSTEMS depend upon BASIC for the Disk Access Commands, and here-to-fore almost all of the TS-2068 software was MACHINE CODE programs. Lets look at just ONE problem that came with this situation. The Disk Operating systems have a rich structure of commands that MOVE BASIC STRUCTURED Data Bases. But our software dealt only in CODE ASCII Files. The <SAVE "name.A$> functions were not useable with our existing software. The result has been a difficulty of fully using our DOS systems.

Our TS-2068, a Z-80 CPU computer, actually has MORE capability for Data Management (with Basic) than ANY of the currently popular computers. Our Disk Operating Systems amplify this superiority, but most of our software is not compatable with this superior capability. Our programs mainly develop and use Code ASCII Files, the management of which requires ASSEMBLY Programming. And DOS CALLS require BASIC Commands.

I guess that the message is for us to develop more programs that are designed to use the TS-2068 SUPERIORITY, which is more efficient management of the variable file. We will now investigate this superiority that the TS-2068 has over the LATEST IBM 486 Computer.

That is a shocking statement! "Better than a new $7000 IBM 468 Computer!". Well, of course I am only referring to the TS-2068's better management of BASIC DATA BASE MANAGEMENT. I'll set up an example in a programming Function: <LET A$=Y$(400 TO 1000):PRINT A$>. That is impossible to do with all of the IBM computers ever made, including the latest $7000 IBM system! Why? Ans: The IBM Systems limit "String Length" to 256 characters. Our TS-2068 can handle String length of almost unlimited length, even with its shortage of Addressable memory. "A$ and Y$" in the above example could be 4000 characters or more in length.

SPEED? The above programming example is executed by our TS-2060 FASTER than any IBM System can "Slice and Transfer" that amount of data, even with its 20 Mhz clock speed.

The TS-2068 has the most efficient "Data Transfer" capability of ALL Existing Computer Systems! But this efficiency has not been widely employed in our software.

We programmers need to look at what we have been given, take advantage of the TS-2068's superiority, and quit using "IBM Methods" of programming. We have the only remaining Z-80 CPU based computer, and we should look deeper into the BASIC LANGUAGE Superiority that the Z-80 provides. No other computer system provides the latitude of DATA MANAGEMENT "in Basic" that the TS-2068 is capable of providing. The "Variable File" management of the TS-2068 is un-excelled in Potential for FAST and EFFICIENT Data management.

the plotter

pc page

by: Rod Gowen

Here we are, back for a second go-round! Did you like the first PC PAGE? I hope so. We are only trying to help. If you find that you also want to help, please let us know. We can use all of the help we can get!

This month *DICK WAGNER*, our loyal and hard-working editor took the time to come up with a little program in *GWBASIC*. If you want to play with it, you can load *GWBASIC* and type it in. We all start somewhere.

We hope that those of you who are attending the meetings and looking at the DOS TUTOR video tape are enjoying it. It is not something that you are likely to learn overnight, but neither is it something that is ULTRA-DIFFICULT! If you have questions, feel free to call me during business hours and I will do my best to answer the question. I am not an "expert", but I have been at it a bit longer than most of you and we can sertainly learn together!

Our PC Shareware library is growing. As usual, we have been adding at least 1-3 megabytes of new and upgraded programs per week to the library. As we have said in the past, we try to test and examine each software title that we add to the library, but that is becoming increasingly hard to do. Too many and too little time make it an impossibility now. If there is something in particular that you want an application or utility for, ask! It may already be here or we can search for it for you.

We did have a couple more folks at the October meeting than were at the one prior. We hope to see more of you at the November meeting as this is the one where we nominate officers. We promise! We will not nominate anyone who will not or cannot serve. Just do not complain about the leadership if you don't like who does the leading! Like the ads say, "VOTE! It's your right!"

Our next PC-SEG meeting will be:

ON: NOVEMBER 9, 1990
AT: 8:30 PM
IN: FAR WEST FEDERAL BANK
OREGON CITY SHOPPING CENTER

EXPRESSCHECK by EXPRESSWARE

A short review by ROD GOWEN

I have been using this EXCELLENT program to keep track of my checkbooks and expenses and income for over 1 year now and can honestly say that it is the best of its type that I have seen! I have tested over 15

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other budget/finance type programs from Quicken to Money Counts and none of them work as simply and easily as this one does. It only takes a few moments to set it up and you can begin entering checks, deposits and even money machine (ATM) transactions. This program can be set up as a simple household budget/check-book or as a full-blown multi-account business type. You can produce reports in many ways; by budget code, payee, type or a complete listing. It makes reconciling the old checkbook a matter of a few seconds work! It has a neat thing called "Quickeys" which are, in effect, "macros". You give the payee field a "/??" (??=whatever you want to call it) and then type in all of the rest of the fields for the check. It is then saved and the next time you need to make out a check to this payee, you just use the "/??" and BANG! The rest of the check is finished - INSTANTLY! Works great for items that need to be paid the same amount each time. There is also a "REMINDER" program supplied that can lie waiting in DOS and when you boot up, will tell you that certain pre-programmed bills are due that day or in the near future. Sound good? It is! AND, it's shareware! If, after you "test drive" it for 30 days or so, you like it, it will cost about $35 to register it and get the printed manual and tech support. Give it a try!

```
50 REM THIS IS A GAME OF STRAWS, SOMETIMERS CALLED STICKS
60 REM JUST FOLLOW THE INSTRUCTIONS AND SEE IF YOU CAN FORCE THE
70 REM   COMPUTER TO TAKE THE LAST STRAW, THUS LOOSING THE GAME.
90 WIDTH 40:COLOR 6,0:KEY OFF:CLS
95 LOCATE 12,12:PRINT "**STRAWS**":FOR DELAY = 1 TO 5000:NEXT:CLS
100 REM STRAWS GAME PROGRAM
110 PRINT :PRINT :PRINT "THE OBJECT OF THIS GAME IS TO AVOID
TAKING THE LAST
 OF 21 STRAWS FROM A PILE":PRINT
120 PRINT "EACH OF US WILL TAKE TURNS IN WHICH WE  MUST REMOVE FR
OM 1 TO 4 STRAW
S":PRINT
130 PRINT "I'M READY, HOW ABOUT YOU?"
140 PRINT "ENTER THE NUMBER OF STRAWS YOU CHOOSE   FOR THE FIRST
ROUND.":PRINT
150 PRINT "REMEMBER TO FOLLOW IT WITH A CARRAIGE   RETURN."
160 A=0
170 S=21
179 PRINT "HOW MANY WILL YOU TAKE ";
180 INPUT H
190 IF H<1 OR H>4 THEN BEEP:GOTO 310
200 IF H<>INT(H) THEN 340
210 M=5-H
220 S=S-5
230 IF S=1 THEN 270
240 PRINT :PRINT "THERE ARE NOW ";S;" LEFT SINCE I TOOK   ";M;" S
TRAWS"
250 PRINT "HOW MANY WILL YOU TAKE NOW";
260 GOTO 180
270 PRINT :PRINT "I WIN SINCE THERE IS ONLY ONE STRAW LEFT AFTER
I TAKE"
280 PRINT M;" STRAWS.":PRINT :PRINT "HOW ABOUT ANOTHER GAME?"
285 INPUT A$:A$=LEFT$(A$,1)
286 IF A$="Y" OR A$="y" THEN 140
300 END
310 PRINT "Your entry is out of range. Must be 1,2,3, or 4."
320 GOTO 180
340 PRINT "Must be an integer like 1,2,3, or 4."
350 GOTO 180
400 END
```

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CORRECTIONS

Our September issue minutes incorrectly associated Frank Davis, Editor of UP DATE magazine, with the SNUG organization. We hope Frank didn't receive material intended for the SNUG newsletter.
We regret this missunderstanding. We have been trying to get information about the SNUG organization so we can take out a membership. This should make it possible for us to better know what is going on in that organization.

Our September issue also indicated incorrectly that Jack Dohany's price for Word-Master was $15.00. It was correctly given at the end of the article as $18.00. Also, we left out his street address. His complete address is 390 Rutherford, Redwood City, CA 94061

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Live One Day At A Time And Make That A Master Piece.

-NOTICE-

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